

Appl. No. 10/761,985
Examiner: Tran, Thien F, Art Unit 2811
In response to the Office Action dated April 27, 2006

Date: July 26, 2006
Attorney Docket No. 10113681

REMARKS

Responsive to the Office Action mailed on April 27, 2006 in the above-referenced application, Applicant respectfully requests amendment of the above-identified application in the manner identified above and that the patent be granted in view of the arguments presented. No new matter has been added by this amendment.

Present Status of Application

Claims 19-30 are pending in the application. Claim 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Clevenger et al (US 6,399,447, hereinafter "Clevenger").

In this paper, claim 19 is amended to recite, *inter alia*, a bended gate structure having a bended gate and a bended gate insulating layer. Claims 24 and 25 are amended to recite that the bended gate and bended gate insulating layer are L shaped in a cross section view, respectively. Support for the amendments can be found at least in Figs. 3 and 4 of the application.

Reconsideration of this application is respectfully requested in light of the amendments and the remarks contained below.

Rejections Under 35 U.S.C. 102(b)

Claim 19-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Clevenger. To the extent that the grounds of the rejections may be applied to the claims now pending in this application, they are respectfully traversed.

The rejections of claims 19 and 25 are insufficient, insofar as they do not comply with the requirements of MPEP 707.07 et seq., which requires that all rejections be stated with completeness and clarity.

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MPEP 707.07(d) requires that the grounds of a rejection be "fully and clearly stated." The office action fails to meet this requirement in the present application in connection with claims 19 and 25.

First, in the rejection of claim 19, the Examiner identifies "a first portion (901) extending along a first direction" of Figs. 1 and 18 of Clevenger as the alleged first portion of the bended gate of claim 19. However, there is no reference number "901" in either Fig. 1 or 18 of Clevenger. If "901" was intended to refer to "109", it is noted that reference number "109" refers to an oxide collar in Fig. 1. On the other hand, reference number "901" refers to a poly layer in Fig. 9.

Second, it is noted that Figs. 1-7 and 8-18 of Clevenger illustrate two distinct embodiments. Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim*. *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) [emphasis added] See also MPEP 2131. The Examiner cannot fairly rely on two distinct embodiments of a reference (i.e., Fig. 1 on one hand, and Figs. 9 and 18 on the other hand) to establish the disclosure of each and every element of the claimed invention *arranged as in the claim*.

Third, in the rejection of claim 25, the Examiner simply restates the limitations of the claim without any indication of what element or elements in Clevenger are considered to be the alleged "bended gate oxide layer" underlying the bended gate.

As the office action fails to state with completeness and clarity any teaching or suggestion of at least the limitations noted above, Applicant submits that the rejection of claim 19-30 should be withdrawn. Should an ensuing office action be mailed which provides new grounds for the rejection of claims 19-30, such an ensuing office action should be made non-final. MPEP 706.07(a).

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Clevenger fails to teach or suggest a transistor comprising a bended gate structure having a bended gate and a bended gate insulating layer, as recited in claim 19.

To anticipate a claim, a reference must teach every element of the claim. In this regard, the Federal Circuit has held:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

"The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

As amended, claim 19 recites a transistor comprising a bended gate structure having a bended gate **and a bended gate insulating layer**, wherein the bended gate structure comprises a first portion extending along a first direction and a second portion extending along a second direction intersecting with the first direction, wherein the first portion of the bended gate is adjacent to the source/drain region and the second portion of bended gate is adjacent to the buried strap out-diffusion region.

To the contrary, in col. 4, lines 51-57, Clevenger teaches:

Thereafter, in the upper portion of the deep trench (which is unfilled up to now) is formed the transistor which includes an N+ strap 301, a gate insulator 302, and the gate conductor 106. That is, deposition and polishing of the gate conductor polysilicon (GC) 106 occurs such that it is flush with the top surface of a nitride pad layer 303. Then, the isolation trench 105 is formed.

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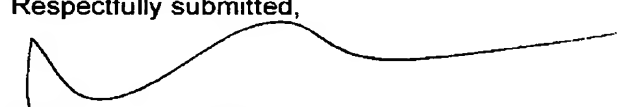
With further reference to Figs. 1 and 3 of Clevenger, it is clear that Clevenger's transistor includes an N+ strap 301, a gate insulator 302, and a gate conductor 106, in which the gate insulator 302 is not bended. Thus, Clevenger fails to teach or suggest a bended gate structure having a bended gate and a bended gate insulating layer, wherein the bended gate structure comprises a first portion extending along a first direction and a second portion extending along a second direction intersecting with the first direction, as recited in amended claim 19.

For at least the reasons described above, it is Applicant's belief that Clevenger fails to teach or suggest all the limitations of claim 19. Applicant therefore respectfully requests that the rejection of claim 19 be withdrawn and the claim passed to issue. Insofar as claims 20-30 depend from claim 19 either directly or indirectly, and therefore incorporate all of the limitations of claim 19, it is Applicant's belief that these claims are also in condition for allowance.

Conclusion

The Applicant believes that the application is now in condition for allowance and respectfully requests so.

Respectfully submitted,



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